

LAX New STARs

Programming is in the details

The new STARs will appear differently in the FMS. For example, the CIVIT is still designed as a Type 3 with runway transitions. As Such it will appear with runway designators beside the name.



The new STARs will appear differently in the FMS. For example, the RIIVR simply appears by its full name. The runway transitions have been removed and placed on the ILS transitions.



Side by side comparison

CIVIT (with runway transitions)

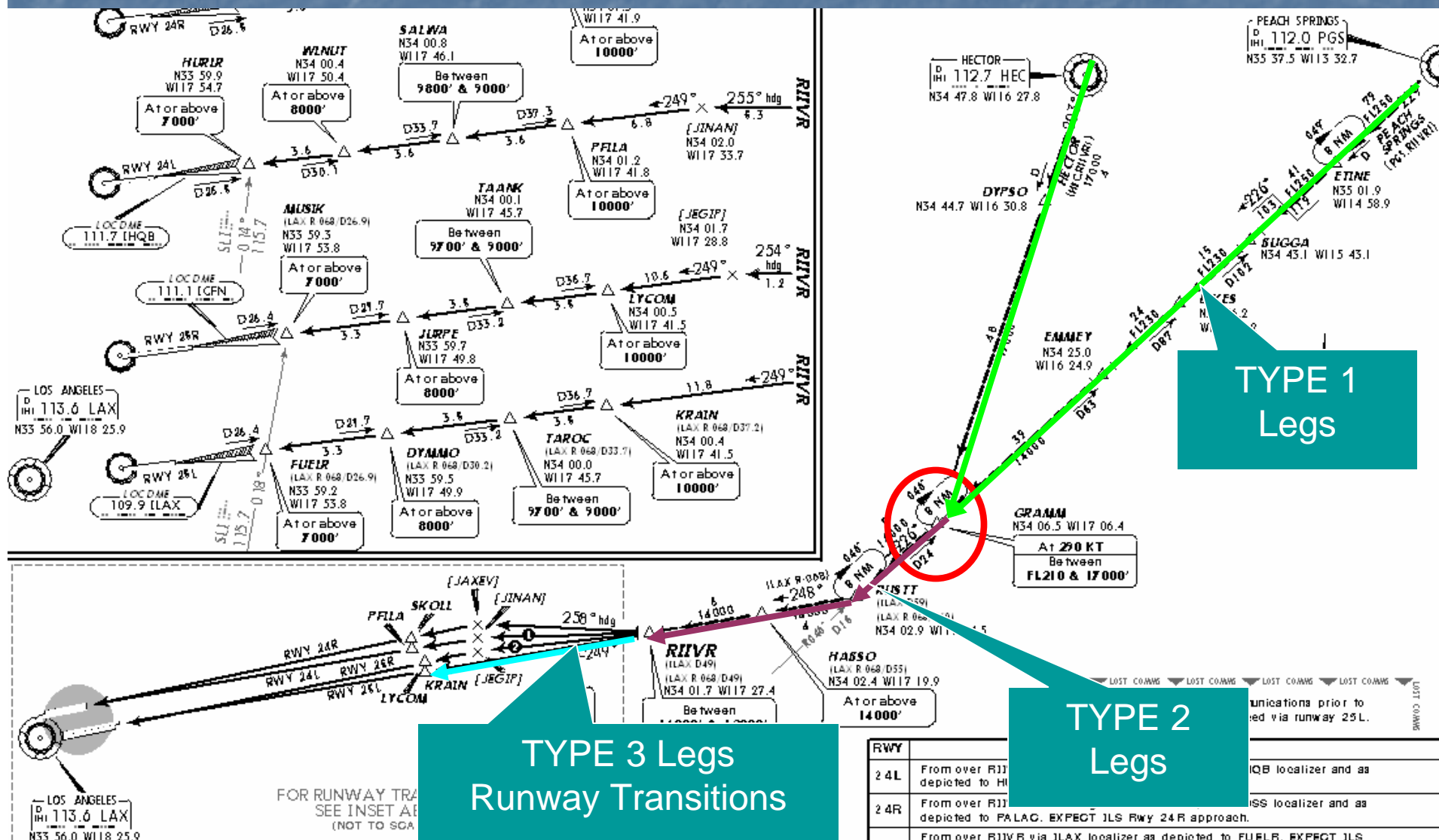
RIIVR (with runway transitions moved to the ILS)



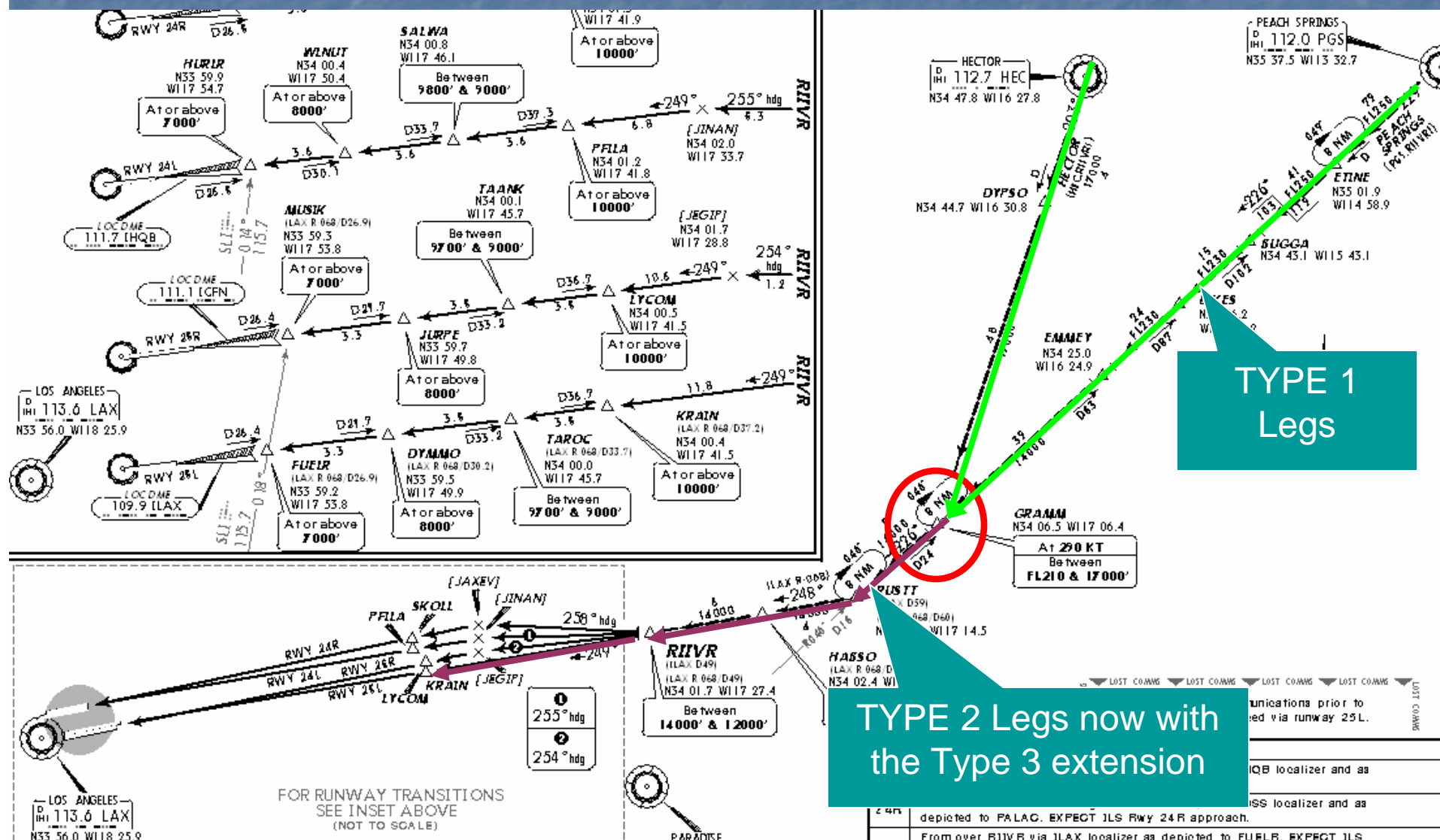
The Old STAR Design

The RIIVR, OLDEE, and SEAVU STARs were designed with runway transitions are coded inside the FMS as Type 1, 2, and 3 legs. These are shown below:

GREEN (Type 1), **PURPLE** (Type 2) and **BLUE** (Type 3)

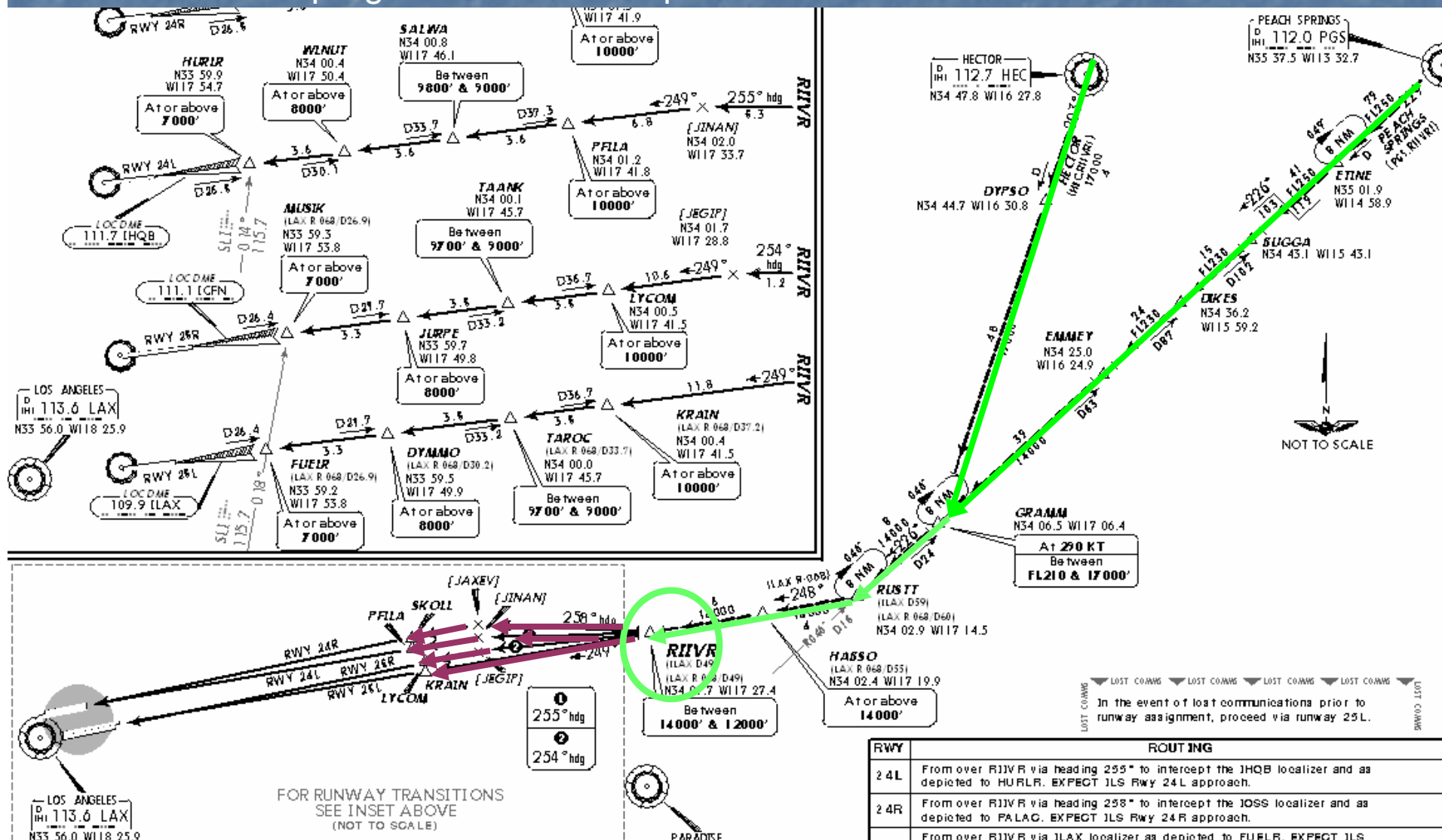


Some FMS boxes are not capable of displaying all 3 types of STAR coding. To account for this database suppliers would code Type 3 by combining them with the end of the Type 2 legs thus creating on large Type 2 leg. This created an issue when a runway change was given and caused the lateral path to disappear from the Navigation Display.



Recently the STARs have been redesigned to fix this problem by attaching all runway transitions to the ILS and RNAV procedures instead of the arrival. As a result the STAR will contain a single path (GREEN) and the ILS will contain the appropriate transitions (PURPLE).

How the FMS is programmed is still important.



The New STAR Design

FMS Programming Steps

Programming the FMS for the new LAX STARs

When programming the FMS for the new STARs, you must select the ILS of intended landing AND the ILS Transition.

The following slides will detail the effects of not selecting the ILS transition.



Initial Programming Steps...



1. Select the STAR



2. Select the Approach for the landing runway

Initial Programming Steps...



3.

Select the ILS/RNAV Transition. Note how the name of the STAR is contained in the transition.



4.

When the change is executed, the path to the runway will not disappear

Runway Change Programming Steps...

When a runway change is received from ATC, reprogramming the FMS is as simple as just selecting the new approach procedure, the appropriate runway transition for the STAR and executing the change.



Due to the new design changes, it is no longer necessary to reprogram the entire STAR.

FMS Programming Errors

The following slides will show what can occur if the approach transition is not selected in the FMS.



FMS Programming Errors



1. If a pilot selects the STAR.....



2. Selects the ILS, BUT...Does not select an approach transition before executing the change.....

FMS Programming Errors



3. The lateral path will drop from the FMS



4. The pilot will not have the transition information for the ILS

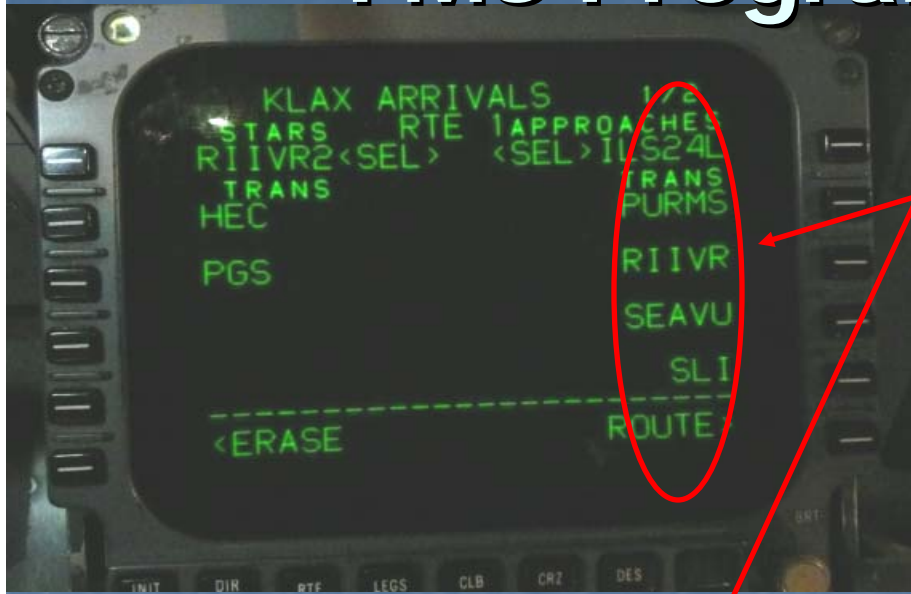
FMS Programming Errors

5.

A path discontinuity will occur



FMS Programming Errors



6. Reselecting the Approach and the appropriate transition will fix the problem



7. The pilot will now have the transition information for the ILS

Remember the differences and ensure correct FMS programming through verification of the LEGS page before execution of the runway change.

